
From: Michael Powers
To: Henning, Alan; Carlin, Jayne; Wu, Jennifer; Jacobson, Martin
CC: John Byers; Kevin J Fenn; Judith H Callens; Raymond G Jaindl
Sent: 3/20/2015 2:51:22 PM
Subject: Re: Oregon CZARA Agriculture meeting

Alan, et al:

I am following up on your email to Kevin Fenn. Below please see the questions and our response.

1. How does ODA determine if a current agricultural practice is preventing the growth/recovery of riparian vegetation? Is there some sort of metric (e.g. density/height of woody vegetation; grazing density) that is used?

The ODA Agricultural Water Quality Management Program documents landscape conditions to determine if an agricultural activity is preventing the establishment and growth of site capable streamside vegetation that provides the required functions. These functions are normally shade, bank stability, and filtration/infiltration of overland flows. The Ag WQ Program looks at the outcomes of any agricultural activity.

To investigate any potential impact from agricultural activities, the Ag WQ Program uses the concept of site capable streamside vegetation. Site capable vegetation is the vegetation that can be expected to grow at a particular site, given natural site factors (e.g., elevation, soils, climate, hydrology, wildlife, fire, floods, etc.) and any historical and current human influences (e.g., legacy issues such as stream channelization, roads, modified stream flows, past land management). We determine site capable vegetation for a specific site based on factors such as: current stream side vegetation at the site, streamside vegetation at nearby reference sites with similar natural characteristics, USDA NRCS soil surveys, and local or regional research.

Once on site we conduct at least one riparian transect at the bank full line. Normally we collect 100 sampling points per transect. At each point, which is a step of the left or right foot, we record, vegetation at the ground, shrub, and tree layers. This allows us to document if we have site capable vegetation and the functions they provide at the site. This documentation is especially useful to measure improvement over time as we will repeat the transect when a follow-up site visit is required to achieve compliance, and compare the first and second transects.

As part of the documentation we will also describe the riparian area. We will document and summarize information such as riparian area width, vegetative species, plant height, ground cover, presence of invasive species, and agricultural activity impacts. We achieve this primarily with photo documentation and associated narrative descriptions.

In addition, we will also document indicators of compliance, such as: bare ground, slumping and unstable banks and resulting erosion, presence and concentration of hoof prints, manure accumulation, livestock paths along the waterway, livestock stream access points, and others.

We will also attempt to document the intensity, frequency, duration, and season of grazing to support the landscape observations if livestock are involved.

2. How is the effectiveness of the SIA program being evaluated? Is the evaluation tied to water quality? If ODA or a local agency works with landowners to upgrade all parcels in a watershed to the no concern or low concern categories, does that suggest water quality will meet standards or at least improve substantially? If ODA finds this is not the case, will there be an opportunity to reassess the criteria that defines no concern, low concern, etc.?

Currently, we have implemented two SIA “test runs”. SIA evaluation is linked to the purpose of the SIA. Its purpose is to evaluate compliance in small geographic areas by classifying landscape conditions to determine the potential for agricultural activities to impact water quality. If a “concern” (low, moderate, significant/serious) is identified, the landowner is referred to the local Soil and Water Conservation District (or other conservation provider) to address concerns. If ODA determines that there is non-compliance, and the landowner chooses not to work with SWCD’s voluntarily, then enforcement actions can be taken. “Success” is determined by ensuring that all agriculture in the SIA is not polluting waters of the state via their agricultural activities.

We recognize that active water quality sampling is an optimum measure of programmatic success, but program and agency capacity limitations prevent us from developing a much more vigorous monitoring process. However, as part of our SIA prioritization process, we include existing Ambient Water Quality monitoring sites as part of the SIA location determination priority matrix.

The SIA process was developed to evaluate and quantify potential compliance and provide a vehicle to identify and address non-compliance. The goal of the SIA process is to establish all agricultural properties in the SIA as of a low or no concern. Our interpretation is that “low” concern equals likely compliance and “no” concern equals compliance with the Agricultural Water Quality regulations.

To meet water quality standards is a collective effort amongst all landowners and land uses within a watershed. We expect that if we can limit the agricultural activities impacts on water quality, thereby allowing streamside vegetation to establish, the SIA process will result in beneficial landscape conditions, limiting agriculture’s impact on water quality.

As move forward with SIA implementation we will continually assess, evaluate, and refine the SIA criteria and process to ensure that agriculture continues to improve landscape conditions which leads to improved water quality.

Please let us know if you would like additional information or if you would like to discuss this further.

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On Mar 17, 2015, at 3:23 PM, Kevin J Fenn <kfenn@oda.state.or.us> wrote:

Marty,

I am forwarding this on to Mike Powers. He is our Lead Policy Specialist. He is more appropriate to provide answers.

Kevin Fenn

On Mar 17, 2015, at 2:32 PM, Jacobson, Martin <Jacobson.Martin@epa.gov> wrote:

Hi Kevin,

Your presentation last week was great. I do, however, have some questions, which are included below.

1. How does ODA determine if a current agricultural practice is preventing the growth/recovery of riparian vegetation? Is there some sort of metric (e.g. density/height of woody vegetation; grazing density) that is used?
2. How is the effectiveness of the SIA program being evaluated? Is the evaluation tied to water quality? If ODA or a local agency works with landowners to upgrade all parcels in a watershed to the no concern or low concern categories, does that suggest water quality will meet standards or at least improve substantially? If ODA finds this is not the case, will there be an opportunity to reassess the criteria that defines no concern, low concern, etc.?

Thanks,

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